DOE – Medical and Infectious Disease Update – Wednesday, April 28, 2004

DOE weekly updates on Bird Flu, Human Influenza, West Nile Virus, or other illnesses and medical issues will continue as appropriate or as requested. The following information is current as of Thursday, April 29, 2004, 0700 hours, EST. Information presented is routinely taken from the Centers for Disease Control and Prevention (CDC), http://www.cdc.gov/, The World Health Organization (WHO), http://www.who.int/en/, the Department of Defense Global Emerging Infections Surveillance and Response System site, (DoD-GEIS) - http://www.geis.ha.osd.mil/, and other creditable sources.

Recent News

<u>ALLERGY</u>-<u>The Accuweather page</u> provides current air quality information with specific charts for <u>Grass Pollen</u>, <u>Overall Pollen</u>, <u>Ragweed Pollen</u>, and <u>Tree Pollen</u> ...

http://wwwa.accuweather.com/adcbin/public/maps_index.asp?type=airq.

China's SARS woes deepen with new suspect case and 700

isolated - 28April2004, BEIJING (**AFP**) - China's SARS (<u>news</u> - <u>web sites</u>) woes deepened with a new suspect case reported and listed in critical condition, as the number of people isolated in Beijing since the crisis flared passed 700. The new case, a 49-year-old retired female doctor, shared a Beijing hospital room with one of the two people already confirmed to have the respiratory disease, the health ministry said Wednesday. It brings to seven the number of suspected Severe Acute Respiratory Syndrome patients in Beijing and eastern Anhui province. All the cases are linked to the Institute of Virology in the Chinese capital, believed to be the source of the outbreak ...

http://news.yahoo.com/news?tmpl=story&u=/afp/20040428/hl afp/health sars china 040428122004.

Experimental Smallpox DNA Vaccine Protects Primates From

Lethal Monkeypox - 28April2004, ScienceDaily --In the first successful study of its kind, scientists have shown that a DNA-based vaccine for smallpox can protect nonhuman primates from monkeypox, a disease that resembles smallpox in humans. The study, performed at the <u>U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID)</u> and published in the May issue of the Journal of Virology, suggests a promising alternative approach to conventional smallpox vaccination. Smallpox, a devastating disease caused by the variola virus, was eradicated in 1979 through the efforts of the World Health Organization (WHO). Currently, infectious variola (one of a class of viruses called orthopoxviruses) is known to exist only in two WHO-sanctioned repositories, one in Russia and the other in the United States. However, there is concern that undisclosed reference stocks of the virus may exist, and its potential as a biological weapon has led to the production and stockpiling of smallpox vaccine and the immunization of some healthcare workers ...

http://www.sciencedaily.com/releases/2004/04/040428061803.htm.

Hold That Stretch: Warm-Up Is Challenged - 27April2004, *by Lorraine Kreahling*, **The NY Times** --They can be spotted in gyms and on ball fields, on running paths and biking trails: people reaching into the air, bending down to touch their toes or grasping their ankles behind their backs. Stretching before exercise is routine for many recreational and professional athletes. But researchers have grown increasingly skeptical about its merits. Now a major study is stirring renewed discussion about when stretching is and is not beneficial ...

http://www.nytimes.com/2004/04/27/health/nutrition/27STRE.html.

Standard Hernia Surgery Works Best in Men - 26April2004, *By Jennifer Warner*, **WebMD** -- Hernia "keyhole" surgery may be less painful for men initially, but a new study shows that the standard, open-surgery technique is superior in terms of long-term effectiveness and safety. In a large study published in the April 29 issue of *The New England Journal of Medicine*, researchers found men who had laparoscopic, or what's known as "keyhole" hernia surgery were more than twice as likely to suffer another hernia compared with those who had conventional hernia surgery.

The study shows that although men who undergo laparoscopic hernia surgery may experience less pain immediately after surgery and return to normal activities slightly earlier, their overall risk of complications is significantly greater. Hernia surgery repair in men is very common, but the most effective surgical technique is not known. The researchers compared the two types of surgeries for repair of an inguinal hernia, a common type of hernia where tissue bulges out because of a weak spot of the abdominal wall. It can occur on one or both side of the groin and is often the result of heavy lifting or the normal wear and tear associated with aging ... http://dailynews.att.net/cgi-bin/health?e=pub&dt=040426&cat=news&st=news98935&src=webmd.

Bush aims for computerized medical records – 26April2004, **United Press International**, Minneapolis, MN --U.S. President George Bush Monday called for computerized personal health records to cut down medical errors and streamline the health care process. Computerization of health care records would include filling out and ordering prescriptions, sending of x-rays via the Internet for quick evaluation and easy transfer or reference of medical history ... "... Medicine ought to be using modern technologies in order to better share information, in order to reduce medical errors, in order to reduce costs to our health care system by billions of dollars." ... http://washingtontimes.com/upi-breaking/20040426-041212-5103r.htm.

First Randomized Trial Of Adult Stem Cell Injections In Heart Failure Patients Shows Benefit - 25April2004, Science Daily, TORONTO --

Injections of adult stem cells into damaged heart tissue significantly improved heart function in patients with severe congestive heart failure, according to results of the first prospective randomized trial of the experimental therapy presented today at the American Association for Thoracic Surgery. Amit Patel, M.D., from the Division of Cardiac Surgery at the University of Pittsburgh School of Medicine and a faculty member of the university's McGowan Institute for Regenerative Medicine, and colleagues from the University of Pittsburgh, Baylor University Medical Center in Dallas and the Department of Cardiovascular Surgery at the Benetti Foundation in Rosario, Argentina, say their findings provide the first convincing evidence that transplantation of adult stem cells that promote growth of blood vessels and heart muscle can be a viable treatment for congestive heart failure ... http://www.sciencedaily.com/releases/2004/04/040426054211.htm.

New Type Of Anthrax Vaccine Moves Into Larger-scale Trial At Saint Louis University – 23April2004, Science Daily, ST. LOUIS - A potentially

safer vaccine to protect against anthrax is moving into a larger-scale clinical trial following a successful pilot study conducted at Saint Louis University School of Medicine and three other sites. Researchers at Saint Louis University's Center for Vaccine Development and its clinical research organization, SoLUtions, are preparing to conduct a phase II human study of a new investigational anthrax vaccine developed by VaxGen Inc. "The goal is to develop an anthrax vaccine with better protection, an improved safety profile and a simpler dosing schedule," said Geoffrey J. Gorse, M.D., principal investigator for the study and professor of internal medicine at Saint Louis University. VaxGen Inc., a California-based biotechnology company, is sponsoring the vaccine development and study through an accelerated program funded by the National Institute of Allergy and Infectious Diseases, a division of the National Institutes of Health ... http://www.sciencedaily.com/releases/2004/04/040422224344.htm.

Bird Flu 2003-2004: Doe Special Medical Update – With information from WHO and the CDC, this update also explains the concepts of viral infection, viral replication, antigenic "drift", and antigenic "shift" ... http://www.eh.doe.gov/health/news/BIRDFLU2003-

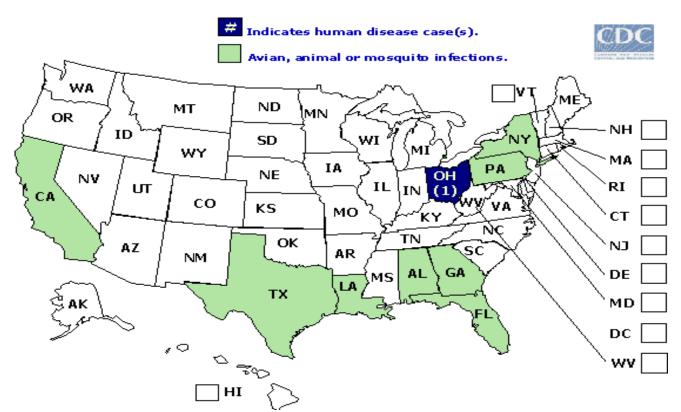
2004_DOESPECIALUPDATE_B200402091.pdf (PDF) or for a choice of PDF or Word format, http://www.eh.doe.gov/health/index.html, and scroll down under "News and Features".

WHO: Avian influenza-fact sheet – 5January2004-Avian influenza ("bird flu") and the significance of its transmission to humans ... http://www.who.int/csr/don/2004_01_15/en/.

2004 West Nile Virus Activity in the United States, reported to

<u>CDC.</u> <u>Maps</u> reporting WNV avian and veterinary activity occurring during 2004 are updated regularly. Human disease cases have been reported in Ohio.

2004 West Nile Virus Activity in the United States (reported to CDC as of April 21, 2004*)



*Currently, WNV maps are updated regularly to reflect surveillance reports released by state and local health departments to the CDC Arbonet system for public distribution. Map shows the distribution of avian, animal, or mosquito infection occurring during 2004 with number of human cases if any, by state. If West Nile virus infection is reported to CDC Arbonet in any area of a state, that entire state is shaded accordingly.

http://www.cdc.gov/ncidod/dvbid/westnile/index.htm

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